CLAIMS:

1. A method for operating a Wireless Local Area Network (WLAN) serviced by a plurality of Wireless Access Points (WAPs), at least some of the plurality of WAPs having directional antennas, the method comprising:

performing a plurality of beaconing operations, each of the beaconing operations corresponding to a respective WAP of the plurality of WAPs such that during the beaconing operation the respective WAP transmits a substantially constant power beacon;

during each beaconing operation, at least one non-beaconing WAP of the plurality of WAPs that has a directional antenna:

listening for the transmitted beacon;

directing an approximate maximum gain vector of the directional antenna toward the transmitted beacon;

determining a relative angular position of the approximate maximum gain vector;

measuring a received strength of the transmitted beacon; and

recording the relative angular position of the approximate maximum gain vector and the received strength of the transmitted beacon; and

processing a plurality of recorded relative angular positions of the approximate maximum gain vectors and a plurality of recorded received strengths of the transmitted beacons to determine relative radio positions of the plurality of WAPs within the WLAN.

2. The method of claim 1, wherein transmitting the substantially constant power beacon includes transmitting the beacon omni directionally.

3. The method of claim 1, further comprising, based upon the relative radio positions of the plurality of WAPs within the WLAN:

determining that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

determining a repositioning of at least one of the plurality of WAPs to remedy the deficiency.

4. The method of claim 3, wherein determining the repositioning of at least one of the plurality of WAPs to remedy the deficiency includes:

estimating relative physical positions of the plurality of WAPs based upon the relative radio positions of the plurality of WAPs; and

based upon estimates of the relative physical positions of the plurality of WAPs, determining a physical repositioning of the at least one of the plurality of WAPs that will remedy the deficiency.

5. The method of claim 3, wherein determining the repositioning comprises:

receiving relative physical positions of the plurality of WAPs;

correlating the relative physical positions of the plurality of WAPs with the relative radio positions of the plurality of WAPs;

determining the repositioning of at least one of the plurality of WAPs to remedy the deficiency is based upon the correlation of the relative physical positions of the plurality of WAPs with the relative radio positions of the plurality of WAPs.

6. The method of claim 1, further comprising, based upon the relative radio positions of the plurality of WAPs within the WLAN:

determining that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

determining an alteration of an antenna gain pattern of at least one of the plurality of WAPs having a directional antenna to remedy the deficiency.

7. The method of claim 1, further comprising, based upon the relative radio positions of the plurality of WAPs within the WLAN:

determining that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

determining an alteration of transmit power of at least one of the plurality of WAPs having a directional antenna to remedy the deficiency.

8. The method of claim 1, further comprising, based upon the relative radio positions of the plurality of WAPs within the WLAN:

determining that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises;

determining that an additional WAP is required to remedy the deficiency; and

recommending a placement of the additional WAP with respect to the relative radio positions of the plurality of WAPs within the WLAN.

9. A Wireless Local Area Network (WLAN) processing component comprising:

a network interface that interfaces the WLAN processing component to a plurality of Wireless Access Points (WAPs) of the WLAN, at least some of the plurality of WAPs having directional antennas; and

a processor communicatively coupled to the network interface that executes a group of instructions comprising:

a plurality of instructions that cause the WLAN processing component to direct the plurality of WAPs to perform a plurality of beaconing operations, each of the beaconing operations corresponding to a respective WAP of the plurality of WAPs such that during the beaconing operation the respective WAP transmits a substantially constant power beacon;

a plurality of instructions that cause the WLAN processing component to direct at least one non-beaconing WAP of the plurality of WAPs that has a directional antenna, during each beaconing operation, to:

listen for the transmitted beacon;

direct an approximate maximum gain vector of the directional antenna toward the transmitted beacon;

determine a relative angular position of the approximate maximum gain vector;

measure a received strength of the transmitted beacon; and

record the relative angular position of the approximate maximum gain vector and the received strength of the transmitted beacon; and

a plurality of instructions that cause the WLAN processing component to process a plurality of recorded relative angular positions of the approximate maximum gain vectors and

a plurality of recorded received strengths of the transmitted beacons to determine relative radio positions of the plurality of WAPs within the WLAN.

10. The WLAN processing component of claim 9, wherein the processor further executes a plurality of instructions that cause the WLAN processing component to direct the respective WAP to transmit the substantially constant power beacon omni directionally.

11. The WLAN processing component of claim 9, wherein the processor further executes:

a plurality of instructions that cause the WLAN processing component to, based upon the relative radio positions of the plurality of WAPs within the WLAN, determine that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

a plurality of instructions that cause the WLAN processing component to determine a repositioning of at least one of the plurality of WAPs to remedy the deficiency.

12. The WLAN processing component of claim 11, wherein the processor further executes:

a plurality of instructions that cause the WLAN processing component to estimate the relative physical positions of the plurality of WAPs based upon the relative radio positions of the plurality of WAPs; and

a plurality of instructions that cause the WLAN processing component to, based upon

estimates of the relative physical positions of the plurality of WAPs, determine a physical repositioning of the at least one of the plurality of WAPs that will remedy the deficiency.

13. The WLAN processing component of claim 11, wherein the plurality of instructions that cause the WLAN processing component to determine a repositioning of at least one of the plurality of WAPs to remedy the deficiency include:

a plurality of instructions that cause the WLAN processing component to receive relative physical positions of the plurality of WAPs;

a plurality of instructions that cause the WLAN processing component to correlate the relative physical positions of the plurality of WAPs with the relative radio positions of the plurality of WAPs; and

a plurality of instructions that cause the WLAN processing component to determine the repositioning of at least one of the plurality of WAPs to remedy the deficiency based upon the correlation of the relative physical positions of the plurality of WAPs with the relative radio positions of the plurality of WAPs.

14. The WLAN processing component of claim 9, wherein the processor further executes:

a plurality of instructions that cause the WLAN processing component to, based upon the relative radio positions of the plurality of WAPs within the WLAN, determine that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

a plurality of instructions that cause the WLAN processing component to determine an alteration of an antenna gain pattern of at least one of the plurality of WAPs having a directional antenna to remedy the deficiency.

15. The WLAN processing component of claim 9, wherein the processor further executes:

a plurality of instructions that cause the WLAN processing component to, based upon the relative radio positions of the plurality of WAPs within the WLAN, determine that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

a plurality of instructions that cause the WLAN processing component to, based upon the relative radio positions of the plurality of WAPs within the WLAN, determine an alteration of transmit power of at least one of the plurality of WAPs having a directional antenna to remedy the deficiency.

16. The WLAN processing component of claim 9, wherein the processor further executes:

a plurality of instructions that cause the WLAN processing component to, based upon the relative radio positions of the plurality of WAPs within the WLAN, determine that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises;

a plurality of instructions that cause the WLAN processing component to, based upon the

relative radio positions of the plurality of WAPs within the WLAN, determine that an additional WAP is required to remedy the deficiency; and

a plurality of instructions that cause the WLAN processing component to, based upon the relative radio positions of the plurality of WAPs within the WLAN, recommend a placement of the additional WAP with respect to the relative radio positions of the plurality of WAPs within the WLAN.

17. A Wireless Local Area Network (WLAN) processing component comprising:

a network interface that interfaces the WLAN processing component to a plurality of Wireless Access Points (WAPs) of the WLAN, at least some of the plurality of WAPs having directional antennas; and

means for performing a plurality of beaconing operations, each of the beaconing operations corresponding to a respective WAP of the plurality of WAPs such that during the beaconing operation the respective WAP transmits a substantially constant power beacon;

means for, during each beaconing operation, at least one non-beaconing WAP of the plurality of WAPs that has a directional antenna:

listening for the transmitted beacon;

directing an approximate maximum gain vector of the directional antenna toward the transmitted beacon;

determining a relative angular position of the approximate maximum gain vector;

measuring a received strength of the transmitted beacon; and

recording the relative angular position of the approximate maximum gain vector

and the received strength of the transmitted beacon; and

means for processing a plurality of recorded relative angular positions of the approximate maximum gain vectors and a plurality of recorded received strengths of the transmitted beacons to determine relative radio positions of the plurality of WAPs within the WLAN.

18. The WLAN processing component of claim 17, further comprising:

means for, based upon the relative radio positions of the plurality of WAPs within the WLAN, determining that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

means for determining a repositioning of at least one of the plurality of WAPs to remedy the deficiency.

19. The WLAN processing component of claim 17, further comprising:

means for, based upon the relative radio positions of the plurality of WAPs within the WLAN, determining that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises; and

means for determining an alteration of an antenna gain pattern of at least one of the plurality of WAPs having a directional antenna to remedy the deficiency.

20. The WLAN processing component of claim 17, further comprising:

means for, based upon the relative radio positions of the plurality of WAPs within the WLAN, determining that wireless coverage within a premises serviced by the plurality of WAPs

is deficient in at least one location of the premises; and

means for determining an alteration of transmit power of at least one of the plurality of WAPs having a directional antenna to remedy the deficiency.

21. The WLAN processing component of claim 17, further comprising:

means for, based upon the relative radio positions of the plurality of WAPs within the WLAN, determining that wireless coverage within a premises serviced by the plurality of WAPs is deficient in at least one location of the premises;

means for determining that an additional WAP is required to remedy the deficiency; and

means for recommending a placement of the additional WAP with respect to the relative radio positions of the plurality of WAPs within the WLAN.